

CLAIMS

1. A memory tag having a non-volatile memory in which in use data is stored, an antenna coil and power supply circuit such that in use the memory tag is powered by inductive coupling, wherein the memory tag also includes a sensor for receipt of transmitted light carrying input signals and a processor for processing of the received input signals, and a modulation circuit for overlay of output signals onto the power supply circuit.
- 10 2. A memory tag according to claim 1 wherein output signals are sent via the inductive coupling in response to input signals received optically.
- 15 3. A memory tag according to claim 1 or 2 wherein the input signals are data and/or control signals.
4. A memory tag according to claim 1 or 2 wherein the output signals are indicative of the data stored in the memory.
- 20 5. A memory tag according to claim 1 wherein the processor further controls the memory and the sensor.
6. A memory tag according to claim 1 wherein the sensor is a CMOS light sensor.
- 25 7. A memory tag according to claim 6 wherein it is implemented on single semiconductor chip.

8. A read/write device, for communication with a memory tag according to anyone of the preceding claims, having a signal generator, an antenna coil and a power supply circuit for powering the memory tag in use by inductive coupling, and wherein the read/write device further includes a light emitter for emission of the light carrying the input signals to the memory tag, and a demodulation circuit for retrieval of the output signals from the inductive coupling.
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9. A read/write device according to claim 8 wherein it further includes a processor for control of the light emitter.
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10. A method of operating a wireless memory tag comprising powering the memory tag by inductive coupling and communicating with the memory tag by transmitting control and/or data signals to the memory tag using optical signals and receiving output signals from the memory tag as modulation of the inductive coupling.
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